

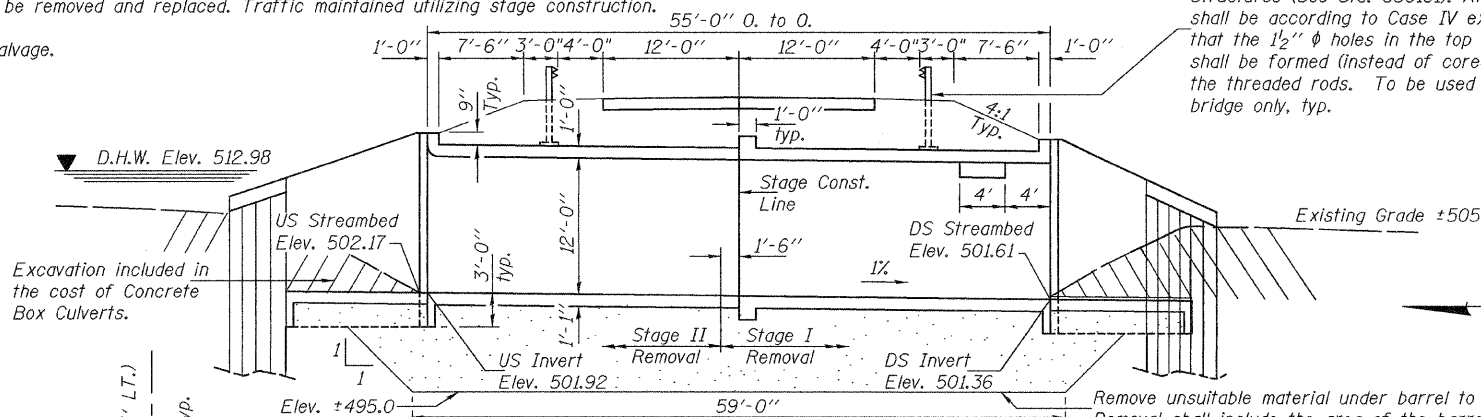
Bench Mark: RR spike found in power pole, located on the south side of IL Route 108, ±460' east of Route 108 bridge (SN 031-0024) over Taylor Creek. Approx. Sta. 1072+93, 38' RT., Elev. 534.801.

Existing Structure: S.N. 031-0024 built in 1928 as F.A.-761, section 104-BR-1 at station 1068+35.00 as a 1 span reinforced concrete T-beam bridge, 43'-2" Bk.-to-Bk. abutments supported on untreated timber piles. Superstructure replacement and widening in 1978 with PPC deck beams and bituminous wearing surface. Existing bridge to be removed and replaced. Traffic maintained utilizing stage construction.

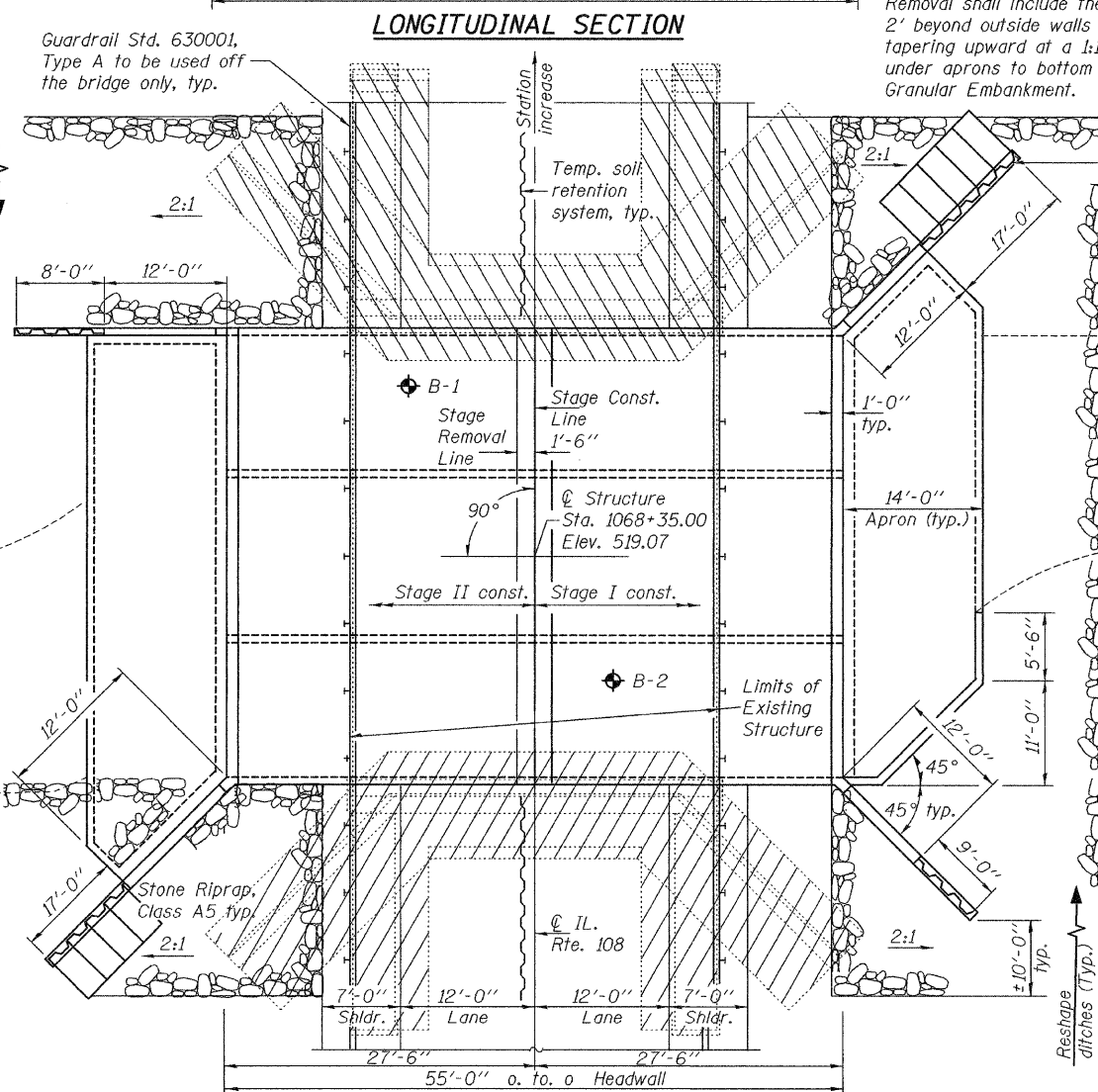
No salvage.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

Steel  $\bar{E}$  Beam Guard Rail, Attached to Structures (See Std. 63010). Attachment shall be according to Case IV except that the  $1\frac{1}{2}$ "  $\phi$  holes in the top slab shall be formed (instead of cored) for the threaded rods. To be used on the bridge only, typ.



Remove unsuitable material under barrel to elevations shown. Removal shall include the area of the barrel plus an additional 2' beyond outside walls and headwalls (approx. 59' by 46') and tapering upward at a 1:1 slope. In addition, remove material under aprons to bottom of cutoff wall. Replace with Porous Granular Embankment.



PLAN

PROFILE GRADE  
(along  $\bar{C}$  F.A.P. Rte. 761)

DESIGNED	Jay D. Edwards
CHECKED	Michael Nelson
DRAWN	h.t. duong
CHECKED	JDE/MAR

EXAMINED *Thomas J. ...*  
PASSED *Ralph E. ...*  
Jan 15, 2009  
ENGINEER OF BRIDGE DESIGN  
ENGINEER OF BRIDGES AND STRUCTURES



EXPIRES 11-30-2010

INDEX OF SHEETS

- 1 General Plan
- 2 Stage Construction Details & Temporary Soil Retention System
- 3 Geotextile Retaining Wall
- 4 Temporary Concrete Barrier for Stage Construction
- 5-8 Culvert Details
- 9 Permanent Sheet Piling Details
- 10 Bar Splicer Assembly Details
- 11 Soil Boring Logs

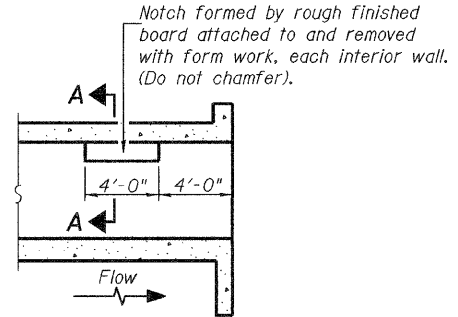
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
FAP 761	104-BR-2	GREENE	82	24	11 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-		Contract No. 76987

GENERAL NOTES

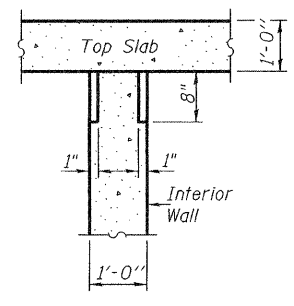
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions. Reinforcement bars designated (E) shall be epoxy coated. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer. Precast alternate not allowed.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal and Disposal of Unsuitable Material	Cu. Yd.	692
Porous Granular Embankment	Cu. Yd.	692
Stone Riprap, Class A5	Sq. Yd.	556
Filter Fabric	Sq. Yd.	556
Removal of Existing Structures	Each	1
Reinforcement Bars, Epoxy Coated	Pound	56190
Bar Splicers	Each	268
Steel Plate Beam Guard Rail, Attached to Structures	Foot	87.5
Temporary Soil Retention System	Sq. Ft.	676
Permanent Steel Sheet Piling	Sq. Ft.	1272
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	388
Geotextile Retaining Wall	Sq. Ft.	150
Geogrid Tieback System	L. Sum	1
Asbestos Bearing Pad Removal	Each	22



LONGITUDINAL SECTION



SECTION A-A

PHOEBE NESTING  
SITE DETAILS  
(Downstream End Only)

WATERWAY INFORMATION

Drainage Area = 5.37 sq. mi. Low Grade Elev. 519.02 ft. @ Sta. 1068+85

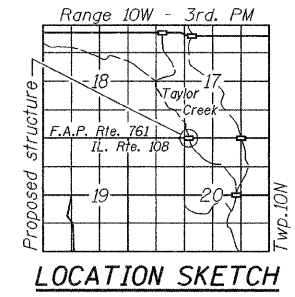
Flood Yr.	Freq.	Q	Opening Sq. Ft.	Nat. H.W.E.	Head - Ft.	Headwater El.
		C.F.S.	Exist. Prop.	Exist. Prop.	Exist. Prop.	Exist. Prop.
Design	50	2,496	306 420	512.98	1.17 0.90	514.15 513.88
Base	100	2,952	321 434	513.35	1.52 1.19	514.87 514.54
Overtopping	N/A					
Max. Calc.	500	4,093	351 454	514.11	2.56 2.06	516.67 516.17
Scour	10	1,505	265 381	511.94	0.56 0.39	512.50 512.33

STATION 1068+35.00  
BUILT 20 BY  
STATE OF ILLINOIS  
F.A.P. RTE. 761 SEC. 104-BR-2  
LOADING HS20-44  
STRUCTURE NO. 031-2012

NAME PLATE  
See Std. 515001

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	Upstream	Downstream
	498.92	498.36



LOCATION SKETCH

LOADING HS20-44  
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS  
2002 AASHTO Standard Specification

DESIGN STRESSES  
 $f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (reinforcement)

GENERAL PLAN  
ILLINOIS ROUTE 108 OVER  
TAYLOR CREEK  
F.A.P. RTE. 761 - SEC. 104-BR-2  
GREENE COUNTY  
STATION 1068+35.00  
STRUCTURE NO. 031-2012